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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,509	03/29/2001	Dennis Sunga Fernandez	FERN-P001C	8530

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FERNANDEZ & ASSOCIATES LLP  
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MENLO PARK, CA 94025

EXAMINER
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VO, TUNG T

ART UNIT	PAPER NUMBER
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2621

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

**Application No.**

09/823,509

**Applicant(s)**

FERNANDEZ ET AL.

**Examiner**

Tung Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Reopen Prosecution*

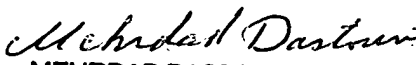
In view of the appeal brief filed on 11/17/2006, and the appeal conference with supervisors, Mehrdad Dastouri and Thai Tran, and the examiner, Tung Vo, on 02/27/2007, PROSECUTION IS HEREBY REOPENED. The office action is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

  
MEHRDAD DASTOURI  
SUPERVISORY PATENT EXAMINER  
TC 2600

It is noted that that claims 1-10, and 12-15 are rejected under 35 U.S.C. 101, and claims 1-23 are rejected as follows.

***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

2. Claims 1-10 and 12-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 1 defines in a console processing unit for goods inventory management coupled via the Internet to at least one fixed detector and at least one mobile sensor, a data structure for representing a monitored object, the data structure comprising embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" - Guidelines Annex IV). That is, the scope of the presently claimed data structure can range from paper on

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which the program is written, to a program simply contemplated and memorized by a person.

The examiner suggests amending the claim to embody the program on "computer-readable medium" or equivalent in order to make the claim statutory. Any amendment to the claim should be commensurate with its corresponding disclosure.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5-12, 14-16, 18-21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rauber et al (US 6,182,053) in view of Woolston (US 5,845,265).

Re claims 1, 3, 5, 7, 11-12, 14, 16, 18, 20-21, and 23, Rauber teaches in a console processing unit (12 of fig. 1) for goods inventory management coupled via LOCAL-AREA-NETWORK (LAN) connection, at least one mobile sensor (16 of fig. 1),

a data structure for representing a monitored object (freight), the data structure a processor (12 of fig. 1) provided in a wireless target unit (16 of fig. 1; 18 of fig. 1) for transmitting or receiving in a network a data structure (LAN), comprising: an object identifier (12 of fig. 1; see also 302-308 of fig. 3) representing one or more goods in production, inventory and shipment (col. 7, lines 1-63); a first object location and a time monitored at such location (212-218 of fig. 2; Note the warehouse would obviously have a detector for detecting the first object (good, product, merchandize)), provided by a detector coupled to the console processing

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unit (12 of fig. 1); and a second object location and a time monitored at such location (220 of fig. 2, Note the retail store would obviously have scanner for scanning the second object (good, product, merchandize)), provided by a sensor coupled to the console processing unit (12 of fig. 1); wherein an access means (12 or 18 of fig. 1; Col. 8, lines 6-13) processes the data structure securely using a digital certificate, watermark or encryption key (Note enter his or her salesperson ID number and customer ID number), such that the data structure is accessible for object-monitoring from only one or more specified network site (12, 18 of fig. 1) or processors the data structure being provided automatically using control software (fig. 2) for network surveillance in response to a user search query (col. 8, lines 29-44); the software (fig. 2) comprising: a network and data communication module (col. 8, lines 45-52; Note any of the RF unites would be used to communicate for the inventory method); an object and map database (col. 7, lines 30-36); an object movement processing module (308 of fig. 3; Note updating the object location; where in step 308, the computer program prompts the operator to enter the location within the distressed inventory warehouse where the inventory will be initially stored before it proceeds through further stages of the inventory management method. As described in more detail below, this location may include a warehouse area, a retail area, or other specialized areas for particular types of freight);

a security management module (col. 8, lines 6-13); an electronic transaction processing modules (col. 8, lines 53-61); a diagnosis tool (504 of fig. 5); a performance report updater modules (508 of fig. 1); and a visual object analyzer module (col. 8, lines 62-67); whereby such modules are functionally integrated to enable surveillance-based commercial transaction using the data structure (figs. 1 and 2); wherein the sensor (16 of fig. 1) comprises a radio-frequency

identification device for locating the identified goods (16 of fig. 1); wherein a neural network or simulation program for recognizing adaptively on or more identified goods for real-time tracking a multiple goods movement (col. 10, lines 5-28, Note the inventory management would recognized the multiple goods that have been selling from one of the PGU's, where the inventory management would obviously determines how many items that are available in the warehouse and in the store, e.g. Wal-mart, using dual two-gigar byte mirroring hard drives, and an integrated local-area-network (LAN) connection with the host computer (12 of fig. 1) may be any type of computer including a microcomputer, minicomputer, or mainframe computer).

It is noted that Rauber does not particularly teach Internet and at least one fixed detector that comprises a camera for observing such identified goods, thereby enabling the sensor and the detector to provide surveillance of the identified goods within an observable range in which the sensor is mobile relative to the detector; the detector comprises visual-analyzer means for recognizing adaptively the identified goods using a neural network or simulation program, thereby enabling secure inventory management of the identified goods as claimed.

However, Rauber suggests that equivalents may be employed and substitutions made herein, so this is evidence to one skilled in the art to modify any conventional and suitable devices and methods to the Rauber's system.

Woolston teaches Internet (col. 14, lines 51-63) and at least one fixed detector (12 of fig. 1) that comprises a camera (12 of fig. 1) for observing such identified goods, thereby enabling the sensor (14 of fig. 1) and the detector (12 of fig. 1) to provide surveillance of the identified goods within an observable range (the camera 12 of figure 1 is able to capturing the goods within an observation range) in which the sensor (14 of fig. 1) is mobile relative to the detector; the

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detector comprises visual-analyzer means (920 of fig. 13, viewing goods) for recognizing adaptively the identified goods using a neural network or simulation program (the image is generated by the camera (12 of fig. 1) and is displaying on the display (16 or 28 of fig. 1)), thereby enabling secure inventory management of the identified goods (804 of fig. 8; Note it is understood that a secure and/or encrypted means may be established between a participant's interface application and a consignment node to transfer sensitive or theft prone information); a software agent (the computer (10 of fig. 1) would obviously have a software agent associated with the monitored object for accessing a database (10 of fig. 1, database for accessing network)); the observable range is modifiable according to a rule set (far or near the camera (12 of fig. 1)), wherein network is used for the inventory management is provided (fig. 1) and tracking down where the items or goods are located for inventory (the operation would obviously track or view the goods for inventory).

Therefore, taking the teachings of Rauber and Woolston as a whole, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Woolston into the console processing unit of Rauber for observing goods with its price during inventory. Doing would allow the user to easily set up his or her own warehouse, store, or retailer for buying and selling goods via the Internet.

Re claim 2, Rauber further teaches a scheduled object location and a time scheduled for such location (col. 7, lines 49-63).

Re claim 6, Rauder further teaches the object identifier (12 of fig. 1) comprises an object name, an object group, an object query, an object condition, an object status, an object location, an object time, an object error, or an object image, video, or audio broadcast signal.



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Re claim 8, Rauber further teaches the monitored object is monitored temporarily using an extrapolated or last-stored positional or visual signal (506 of fig. 5).

Re claim 9, Rauber further teaches the monitored object is authenticated according to a voice pattern, a finger-print pattern, a handwritten signature, or a magnetic or smart-card signal (fig. 4, ID salesman).

Re claim 10, Rauber further teaches the monitored object is provided an electronic file comprising a book, a greeting card, a news report, a sports report, a stock report, an artwork, a research database, a personal list, a recorded or live voice or music transmission, an electronic tool, or a commercial transaction (224, 226, and 228 of fig. 2).

Re claims 15 and 19, Rauber further teaches the data structure indicates in-stock availability of the identified goods for transacting shipment (fig. 3), and a tax-rate for transaction at the location of the identified goods (426 of fig. 4).

5. Claims 13, 17, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rauber et al (US 6,182,053) in view of Woolston (US 5,845,265) as applied to claims 1, 11, and 20, and further in view of Durbin et al. (US 6,039,258).

Re claims 13, 17, and 22, the combination of Rauber and Woolston teaches the sensor is mobile in the observation range except a sensor signal port for sensing a low-power or fuel condition of the identified goods, thereby enabling the console processing unit to indicate or warn a down period for using the identified goods as claimed.

Durbin teaches a sensor signal port for sensing a low-power or fuel condition of the identified goods, thereby enabling the console processing unit to indicate or warn a down period

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for using the identified goods (14 of fig. 1; Note the somatic communication system 14 may be utilized to indicate when the battery level is low, when there is a system error in the operating system, and other various alarm type of signals).

Therefore, taking the teachings of Rauber, Woolston, and Durbin as a whole, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Durbin into the combined system of Rauber and Woolston for recognizing the low power or battery of the sensor as suggested by Durbin (14 of fig. 1). Doing so would allow the user to change or recharge the battery in advance to prevent damage of the handheld or portable sensor.

1. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rauber et al (US 6,182,053) in view of Woolston (US 5,845,265) as applied to claim 1, and further in view of Kennedy (US 6,301,480).

Re claim 4, the combination of Rauber and Woolston does not particularly teach the detector comprises an accelerometer as claimed.

However, Kennedy teaches a mobile communication unit (12 of fig. 1) comprises an accelerometer and personal health sensor (col. 3, lines 5-19).

Therefore, taking the combined teachings of Rauber, Woolston and Kennedy as a whole, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Kennedy into the system of the combined system of Rauber and Woolston for the same purpose of communicating between the remote buyer and central station fast and more accuracy. Doing so would provide the advantages of the system include the adaptation of the system to provide mobile units are associated with cars, trucks, boats, barges, airplanes, cargo holders,

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persons or other mobile items such as ambulance vehicle that desire a selection of services.

These services include emergency services, roadside assistance, information services (e.g., directions, news and weather reports, financial quotes, etc.), or other as suggested by Kennedy.

### ***Conclusion***

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Odom et al (US 6,058,379) discloses real-time network exchange with seller specified exchange parameters and interactive seller.


### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung Vo whose telephone number is 571-272-7340. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000....



Tung Vo  
Primary Examiner  
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